



Dart Hawkesbury
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada
Tel (613) 632-5200
Fax 613 632-5246

Purchasing Receipt

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Pric
PO041482	ACI001-VC	1	1	Net 30	M1010S.125	1010-1025 Steel .125 : AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W NO SCALE ON SHEET MINIMUM YIELD TENSILE STRENGTH= 28KSI MINIMUM ULIMATE TENSILE STRENGTH= 42KSI COLD ROLLED receive sf				32	11/1/2018	32		S123398	Defective	10/31/2018	\$ 4.00
		2			MT-HRS-P-0.625	Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				16		16		S123399	Stock	10/31/2018	\$ 26.7
		3			M1018B0.625X10.000	1010-1025 Steel Bar .625 X 10.000 : MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W receive ft				4		4		S124284	Quarantine	11/2/2018	\$ 80.0
		4			M1018R1.625	round bar 1.625 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108				12		12		S123481	Stock	10/31/2018	\$ 9.94
		5			M304B0.750X1.000	304 Bar 0.750 X 1.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft						13		S124458	Stock	11/2/2018	\$ 12.14
		6			M304B1.000X1.250	304 Bar 1.000 X 1.250" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft						14		S124459	Stock	11/2/2018	\$ 20.23
		7			M304R0.313	304 SS Round bar .313 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft						12		S123400	Stock	10/31/2018	\$ 0.91
		8			M303R0.500	303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft				36		36		S123401	Stock	10/31/2018	\$ 2.83
		9			M303R1.000	303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft				24		24		S123402	Stock	10/31/2018	\$ 10.15
		10			M303R0.750	303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft						28		S123403	Inactive	10/31/2018	\$ 5.41
		12			M4130NT0.500W.083	4130 Round Tube .500 X .083W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft				105	11/12/2018	105		S130961	Stock	11/9/2018	\$ 14.50
		13			M4130NR0.250	4130 Steel Round Bar .250" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft				24	11/1/2018	24		S130965	Defective	11/23/2018	\$ 15.85

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receiv Date
		14			M6061T6R1.000	Round Bar 1.00" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				20		20		S123404	Stock	10/31/2018
		15			M6061T6R1.125	6061 Round Bar 1.125 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				25		25		S123405	Stock	10/31/2018
		16			M6061T6R1.500	6061-T6 Round Bar 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				15		15		S123406	Inactive	10/31/2018
		17			M6061T6S0.875X2.250	6061-T6 SHEET 0.875" thk, 2.250" wide : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209				12		12		S124460	Stock	11/2/2018 \$ 19.
		18			M6061T6B1.000X3.000	6061T6 Bar 1.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12		S123407	Stock	10/31/2018 \$ 11.50
		19			M6061T6S1.000X3.625	6061T6 SHEET 1.000 X 3.625 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209				6		6		S124461	Stock	11/2/2018 \$ 39.17
		20			M6061T6B1.000X06.000	6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				36		36		S123777	Stock	10/31/2018 \$ 28.15
		21			M6061T6S2.500X7.000	6061T6 SHEET 2.500 X 7.000 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209				4		4		S124462	Stock	11/2/2018 \$ 191.2

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	F
		22			M6061T6B2.500X01.500	6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				36		36		S124463	Stock	11/2/2018	\$
		23			M6061T6B0.625X00.625	6061T6 Bar 0.625 X 0.625 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S123408	Stock	10/31/2018	\$ 1
		24			M6061T6B2.500X2.500	6061T6 Bar 2.500 X 2.500 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				6		6		S123409	Stock	10/31/2018	\$ 28
		25			M6061T6B1.500X2.000	6061-T6 Bar 1.50 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S123410	Stock	10/31/2018	\$ 13.1
		26			M6061T6B2.000X3.000	6061T6 Bar 2.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12		S123411	Stock	10/31/2018	\$ 23.7
		27			M6061T6A1.000W.125	6061T6 Angle 1.00 X 1.00 X .125W : MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE AS PER AMS-QQ-A-200/8 receive ft				20		20		S123412	Stock	10/31/2018	\$ 1.05
		28			MT-4140QT-R0.875	AISI 4140 Quenched & Tempered Steel Round Bar 0.875" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT						20		S124464	Stock	11/2/2018	\$ 4.21
		29			MT-4140QT-R2.750	AISI 4140 Quenched & Tempered Steel Round Bar 2.750" Dia. : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT				15		15		S124465	Stock	11/2/2018	\$ 35.91
		30			MT-4140QT-R4.000	AISI 4140 Quenched & Tempered Steel Round Bar 4.000" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT				4		4		S123413	Stock	10/31/2018	\$ 95.17

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	P
		31			MT-HRS-R-6.000	Hot Rolled Steel Round Bar 6.000" Dia. MATERIAL: HOT ROLLED STEEL ROUND BAR ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				2		2		S123414	Stock	10/31/2018	\$
		32			MT-HRS-P-0.625	Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				16		16		S123415	Stock	10/31/2018	\$ 2
		33			M17-4-R0.750	17-4 Round Bar .750 : 17-4 PH / S17400 / TYPE 630 SS ROUND BAR PER AMS 5643/ ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft				24		25		S123416	Stock	10/31/2018	\$ 10
Total:										622		629					

Plex 2/19/2019 8:49 AM Dart Lavoie.Chant.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO041482

PO Date: 10/26/18

Due Date: 11/1/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

E-MAILED
OCT 26 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: QUOTE NO. SOU0141363

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1 ✓ AK		M1010S.125		1010-1025 Sheet .125 : AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W NO SCALE ON SHEET MINIMUM YIELD TENSILE STRENGTH= 28KSI MINIMUM ULTIMATE TENSILE STRENGTH= 42KSI COLD ROLLED receive sf	Firmed	-	11/1/18	32 sf	0 sf	32 sf	\$3.9975/sf	\$127.92
2 ✓ AK		MT-HRS-P-0.625		Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	16 sf	0 sf	16 sf	\$26.7625/sf	\$428.20
3 ✓ AK		M1018B0.625X10.000		1010-1025 Steel Bar .625 X 10.000 : MATERIAL: AISI 1010- 1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W receive ft	Firmed	-	11/1/18	4 ft	0 ft	4 ft	\$80.00/ft	\$320.00
4 ✓ AK		M1018R1.625		round bar 1.625 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$9.936666/ft	\$119.24

Plex 10/26/18 12:23 PM dart.lavoie.chantal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5 ✓ AT		M304B0.750X1.000		304 Bar 0.750 X 1.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$12.136666/ft	\$145.64
6 ✓ AT		M304B1.000X1.250		304 Bar 1.000 X 1.250" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$20.227/ft	\$242.72
7 ✓ AT		M304R0.313		304 SS Round bar .313 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$0.91/ft	\$10.92
8 ✓ AT		M303R0.500		303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	36 ft	0 ft	36 ft	\$2.834/ft	\$102.02
9 ✓ AT		M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$10.145/ft	\$243.48
10 ✓ AT		M303R0.750		303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$5.406/ft	\$129.74
11 ✓ AT		M303B1.000X03.000		303 Bar 1" X 3" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$48.785/ft	\$585.42
12 ✓ AT		M4130NT0.500W.083		4130 Round Tube .500 X .083W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft	Firmed	-	11/12/18	100 ft	0 ft	100 ft	\$14.50/ft	\$1,450.00



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
13		M4130NR0.250		4130 Steel Round Bar .250" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$15.85/ft	\$380.40
								24 ft			At 18/11/23	
14		M6061T6R1.000		Round Bar 1.00" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$2.737/ft	\$54.74
								20 ft			At 18/10/31	
15		M6061T6R1.125		6061 Round Bar 1.125 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	25 ft	0 ft	25 ft	\$4.644/ft	\$116.10
								24 ft			At 18/10/31	
16		M6061T6R1.500		6061-T6 Round Bar 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	15 ft	0 ft	15 ft	\$6.351/ft	\$95.27
								15 ft			At 18/10/31	
17		M6061T6S0.875X2.250		6061-T6 SHEET 0.875" thk, 2.250" wide : MATERIAL: 6061- T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$19.583/ft	\$235.00
								12 ft			At 18/11/02	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
18 ✓ AK		M6061T6B1.000X3.000		6061T6 Bar 1.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$11.499166/ft	\$137.99
19 ✓ AK		M6061T6S1.000X3.625		6061T6 SHEET 1.000 X 3.625 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed	-	11/1/18	6 ft	0 ft	6 ft	\$39.166/ft	\$235.00
20 ✓ AK		M6061T6B1.000X06.000		6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	36 ft	0 ft	36 ft	\$28.192/ft	\$1,014.91
21 ✓ AK		M6061T6S2.500X7.000		6061T6 SHEET 2.500 X 7.000 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed	-	11/1/18	4 ft	0 ft	4 ft	\$191.25/ft	\$765.00
22 ✓ AK		M6061T6B2.500X01.500		6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	36 ft	0 ft	36 ft	\$16.74/ft	\$602.64

Plex 10/26/18 12:23 PM dart.lavoie.chantal



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
23		M6061T6B0.625X00.625		6061T6 Bar 0.625 X 0.625 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$1.541/ft	\$18.49
24		M6061T6B2.500X2.500		6061T6 Bar 2.500 X 2.500 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	6 ft	0 ft	6 ft	\$28.735/ft	\$172.41
25		M6061T6B1.500X2.000		6061-T6 Bar 1.50 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$13.969/ft	\$167.63
26		M6061T6B2.000X3.000		6061T6 Bar 2.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$23.705/ft	\$284.46
27		M6061T6A1.000W.125		6061T6 Angle 1.00 X 1.00 X .125W : MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE AS PER AMS-QQ-A-200/8 receive ft	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$1.045/ft	\$20.90



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041482

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
28 ✓ AT		MT-4140QT-R0.875		AISI 4140 Quenched & Tempered Steel Round Bar 0.875" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$4.211/ft	\$84.22
29 ✓ AT		MT-4140QT-R2.750		AISI 4140 Quenched & Tempered Steel Round Bar 2.750" Dia. : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	15 ft	0 ft	15 ft	\$35.91/ft	\$538.65
30 ✓ AT		MT-4140QT-R4.000		AISI 4140 Quenched & Tempered Steel Round Bar 4.000" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	4 ft	0 ft	4 ft	\$95.17/ft	\$380.68
31 ✓ AT		MT-HRS-R-6.000		Hot Rolled Steel Round Bar 6.000" Dia. MATERIAL: HOT ROLLED STEEL ROUND BAR ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	2 ft	0 ft	2 ft	\$121.075/ft	\$242.15
32 ✓ AT		MT-HRS-P-0.625		Hot Rolled Steel Plate 0.625" thk MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	16 sf	0 sf	16 sf	\$26.7625/sf	\$428.20



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO041482**

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
33 ✓		M17-4-R0.750		17-4 Round Bar .750 : 17-4 PH / S17400 / TYPE 630 SS ROUND BAR PER AMS 5643/ ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$8.2754166/ft	\$198.61
											Grand Total: \$10,078.75	

Order Notes

Procurement Quality Clauses

- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents
- A046 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/26/18 12:23 PM dart.lavoie.chantal



ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

Copy

CO00117767

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : LUSSIER Tél.: (613) 632-5200 X 730

Instruction F-M

Delivery Route 5

Customer N°

CLI0001056

Date

2018/10/29

Delivery date

2018/11/02

Your order N°

PO041482

Processed by

Denis Quenneville

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Product Description	Weight	Qty	UM	PCS NB		Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C
1 FLAT SS 3/4 X 1 SS304 NS FSS-341 1 X HEAT: 61055180 AT 10484	30.60	12.00	PI_\$CLB		12' 5 3/4					
2 FLAT SS 1 X 1 1/4 SS304 (R) FSS-1114 1 X HEAT: 56180563 AT 3482	51.00	12.00	PI_\$CLB		13' 40 3/4					

Note : ATTENTION: MILL TEST REQUIS

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 81.60

NIR : R-109516-6

Prepared By :

Verified By :

Delivered By : 

Time

Customer's Signature

Date

Y M D
11 01 102



ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Customer

CO00119273

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

F-M

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : PATRICK LUSSIER Tél.: (613) 632-5200 X 730

Delivery Route 5

Customer N° CLI0001056
Date 2018/11/06
Delivery date 2018/11/08
Your order N° po041482
Processed by Denis Quenneville
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 CR SHEET 11G (4 X 8) FEQR-11G48 3269 1 sheet 48 x 96 Heq: 3801D4 VOIR RMA 1940 MATERIEL A RAMASSER		0.00	PI2_\$CLB	0.00						
				0.00						

Note : C: ATTENTION: MILL TEST REQUIS

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and its warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (LBS) : 0.00

NIR : R-109516-6

Prepared By :

Delivered By :

Time

Customer's Signature

Y M D

HST

Total (\$CAD)

Deposit

Balance

16.63
144.55
0.00
144.55



ESSAR STEEL ALGOMA INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4

SO No. Item & Date: 6058245 000030 2017/11/13	Shipment No. & Date: 1000261807 2017/11/14	TC No., Date & Time: ESA-441737 2017/11/15 - 14:38:52
Sold to Customer Name and Address:	Ship to Customer Name and Address:	Customer PO NO./Item: C43054 / 3
		BOL NO.: 1000261807
		Customer No.: MANITOULIN TRANSPORT - 840004-REV. (82314
		Carrier: MANITOULIN TRANSPORT - 840004-REV. (82314

Customer Specification: CR STEEL SHEET Carbon 007 GS ALUMINUM A1006 CS TY B (16) Batch Annealed Top Semi Critical Surface Improved Shape Pickled Light Oiled Matte Finish Edge Sealant Required
Gauge type MIN - 0.4 0.0080" Coil break considered

Supplementary Instructions: Test Cert: Harold.pallin@essarsteel.com

Insip TR: Chemical Analysis

ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES.
THIS FULL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705) 945-4088 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.
METS EN 10004 3.1

300 QUALITY AND ENVIRONMENTAL CERTIFICATE AVAILABLE AT WWW.ALGOMA.COM

ALL HEATS FULLY KILLED.

HEATS INDICATED WITH (*) FINE GRAINED.

HEATS INDICATED WITH (H) Made in Canada for NAFTA duty preference and NAFTA marking purposes

Dimensions (T x W x L)		Heat No.-488	Batch No.	Quantity	No. of Pos	Dimensions (T x W x L)	Heat No.-488	Batch No.	Quantity	No. of Pos
0.1130" x 48.000"		3801D4-03	TBS1085	27,400 LB	1	0.1130" x 48.000"	3801D4-03	TBS1087	26,930 LB	1
CHEMICAL PROPERTIES										
Heat No. (Ref)	C	Mn	P	S	Si	Al	Mo	Cu	Ni	As
3801D4*	0.03	0.25	0.008	0.007	0.021	0.03	0.00	0.03	0.001	0.0053

C775961
962

KASHIF REHMAN
MANAGER METALLURGICAL SERVICES

WARNING THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE INCLUDING DESIGN OR CALCULATION AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. M1010-S	REV. A SHEET 1 OF 1
DATE 01.06.13		TITLE 1010-1025 SHEET SCALE NTS	
A	01.06.13	NEW ISSUE	
A1	04.03.09 #47	ADD ASTM A1008 AND COLD ROLLED	

PURCHASE MATERIAL :

ASTI 1010-1025 OR ASTM A36 / A366 / A1008
OR CSA G40-21, 38W / 44W / 50W / 60W / 70W

MINIMUM YIELD TENSILE STRENGTH = 28 KSI

MINIMUM ULTIMATE TENSILE STRENGTH = 42 KSI

COLD ROLLED

PART NUMBER :

M1010-S | TT | GA WHERE TT = GAUGE THICKNESS
GA

EG. 16 GAUGE STEEL = M1010-S16 GA

RELEASED
01.06.13 #

Copyright © 2001 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1005.125
 DATE: 19/01/09

PO / BATCH NO.: P004148.2/S123398

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 325+
 QUANTITY INSPECTED: 325+
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.125"
 THICKNESS RECEIVED: 0.125"
 SHEET SIZE ORDERED: 4'x8'
 SHEET SIZE RECEIVED: 4'x8'

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	N	ASTM A1008
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	HT-380104
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>61</u> DATE: <u>19/01/09</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



ACIER QUELLETTE INC.
935, Boul. du Hâve
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Factory

CO00117764

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

F-M

Shipped to

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : PATRICK LUSSIER Tél.: (613) 632-5200 X 730

Delivery Route 5

Customer N°
Date

Delivery date
Your order N°

Processed by
Salesman

Carrier
Credit Terme

CL10001056

2018/10/29

2018/11/01

PO041482

Denis Quenneville

QUELLETTE VALLEYFIELD
Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only					
				CMD	EXP	B/O	IN	I	S	C	OUT	
1 FLAT CR 5/8 X 10 1018 NS FCR-5810 1 pcs 10" x 48" AC21078-MGR-18/10/31	85.00	4.00	PL \$CLB	0.00	1x4							
Note : C: ATTENTION: MILL TEST REQUIS												

Total Weight (LBS) : 85.00

NIR : R-109516-6

Conditions :
All sold and delivered materials remain the property of "Acier Quellette Inc." until payment is made in full, complete and cashed. All test materials are at the buyer's expense. The warranty offered by "Acier Quellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Quellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Y M D
| | |
| | |

HST 41.60
Total (\$CAD) 361.60
Deposit 0.00
Balance 361.60

Qic



P.O. Box 399
110 Hopkins Street
Buffalo NY 14240

CERTIFICATION

CERTIFICATE	Rev
B103422	1
DATE	11/18/10
PAGE	5

PURCHASE ORDER MON-40840

ORDER 682617-1

CUSTOMER ITEM

ITEM 614275132181

GRADE 1018

SHAPE Flat

SIZE 5/8 x 10

SIZE MM 15.8750 x 254.0000 MM

LENGTH 11' 0" / 12' 6"

LENGTH MM 3352.8 / 3810

1018 COLD DRAWN ASTM A108-09 & A29-09 ASTM A108 & A29 Spec/Rev: Spec/Rev: ASTM A108-07 . Spec/Rev: ASTM A29-05

HEAT		GRAIN PRACTICE		SOURCE / MELTED			CAST		REDUCTION RATIO		DI				
H108766		COARSE		ALTON STEEL (USA)			STRAND		7.5:1						
C	MN	P	S	SI	N	OR	MO	CU	AL	V					
0.18	0.69	.015	.021	0.250	0.09	0.12	.020	.270	.004	.008					
H	TE	AS	PS	SE	BI	D	NS								
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		.0080					
LOT		JOB		WEIGHT (LBS)		PIECES		LOT		JOB		WEIGHT (LBS)		PIECES	
3383128		WSP116		2.088		8									

WE, hereby certify that these goods were produced in compliance with all applicable requirements of sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders of the United States Department of Labor issued under section 14 thereof. Material was not exposed to mercury or any metal alloy that is liquid at ambient temperature during processing or while in our possession. No weld repairs performed on the above material.

CERTIFICATE OF TEST

By:

Walter P. Kretzler - Director of Q.A./Chief Metallurgist

Heat: H108766

airford
GR
5/8 x 10
Per 1013
7/8 x 10



DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CP	APPROVED 	DRAWING NO. M1010-B	REV. A SHEET 1 OF 1
DATE 01.12.06		TITLE AISI 1010-1025 BAR	SCALE NTS
A	01.12.06	NEW ISSUE	

Line 3.

M1010B0.625x12.000

PURCHASE MATERIAL:

AISI 1010-1025 ^{AI} OR ASTM A36 / A366 / A569 / A570
OR CSA G40-21, 38W / 44W / 50W / 60W / 70W

PART NUMBER:

M1010-B | T.TTT | x | WW.WWW | WHERE T.TTT = THICKNESS (IN INCHES)
THICK | WIDTH | WW.WWW = WIDTH (IN INCHES)

EG. 0.75" x 2.50" BAR = M1010-B0.750x02.500

RELEASED
01.12.07

Copyright © 2001 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1018BD.625X10.000

PO / BATCH NO.: P004482/S124284

DATE: 19/02/19

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.625"

QUANTITY RECEIVED: 4P1

THICKNESS RECEIVED: 0.625"

QUANTITY INSPECTED: 4P1

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	1018
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	LT: H108766
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>61</u>	SIGNED OFF BY: _____		
DATE: <u>FEB 14 2019</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

BOLLINGHAUS[®]
STEELBollinghaus Steel, SA
DIN EN ISO 9001:2008
TÜV CERT No. 01 100 030458

Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade

EN 10204:2004 / 3.1

No.: / Nr.: /Nr.:

0000144527

Unsere Innere Verweisung /Our Int. Ref/ N/ ref int

5600041814 000070

Datum / Date / Data

01.08.2018

Normen / Standards / Normas

TYPE 304/UNS S30400 and TYPE 304L/UNS S30403 acc. to ASTM A276/A276M-17, ASTM A182/A182M-18, ASTM A193/A193M-17, ASTM A479/A479M-18, ASTM A320/A320M-17a, ASTM A314-15, ASTM A262-15 Pract. E, AMS QQ-S-763D, AMS 5639J, AMS 5647K, ASME SA479/SA479M-2017, ASME SA276, ASME SA182/SA182M-2017, ASME SA193/SA193M-2017, ASME SA320/SA320M-2017, NACE MR0175-2016, execution as per ASTM A484/A484M-18.

Kunde / Customer / Cliente

Endgültiger Kunde / Final Customer / Cliente Final

Bestell Nr./Order Nr./ Enc.Nr. C115288

Bestell Nr./ Order Nr./ Enc.Nr. C115288.07

Produktgruppe / Product Group / Grupo Produto

Gewicht / Weight / Peso

Bunde / Bundle / Atados

AISI 304L FLAT 3/4 X 1"

975 lb

01

Werkstoff-Nr.

Material-no.

Qualidade

1.4307

Werkstoff-Normbezeichnung / Material standard grade / Norma do material

X 2 CrNi 18-9

Beschreibung / Description / Descrição

Stainless steel flat bars, hot rolled, heat treated, straightened and pickled.

US DFAR 252 225-7009: MELT SOURCE: Germany / MFG: Portugal.

Schmelzen Nr.
Cast nr. / Fusão nr.

Chemische Analyse in % / Chemical composition in % / Análise química em %

61055180

C

0.022

Si

0.360

Mn

1.890

P

0.030

S

0.029

Cr

18.140

Ni

8.080

EAF

Mo

0.110

Co

0.210

Cu

0.520

N

0.079

Ti

0.002

-

-

-

-

Proben Nr.

Test no.

Amostra no.

ASTM E399

Kerbschlagarbeit

Impact Test

Resiliância

{Charpy V}

{J}

217.0

Streckgrenze

Yield point

Tensão limite

Rp 0,2 %

{Ksi}

47

Dehngrenze

1% point

Limite de extensão

Rp 1,0%

{Ksi}

55

ASTM A370

Zugfestigkeit

Tensile strength

Tensão de ruptura

Rm

{Ksi}

94

Dehnung

Elongation

Alongamento

A5

4D

{%}

55.3

58.4

{%}

Einschnürung

Reduction of area

Coef. Estricção

Z

{%}

69.0

Visuelle Kontrolle

Visual inspection

Inspeção visual

☒

OK

ASTM E10

Härte

Hardness

Dureza

162

{HB}

ASTM A262 Practice E

Korrosionsbeständigkeit

IC Test

Comprovação Intermetálica

OK

Werkstoffverständiger

Quality Control Representative

Inspector da Qualidade

N 305

Nuno Silva (N-NS)

Wärmebehandlung

Heat treatment

Tratamento térmico

Annealed Quenched 1800 °F (1050 °C)

(water quenched)

Bemerkungen / Remarks / Observações

Country of origin: Portugal. No weld repair done.

Material is free of mercury and radiation contamination.

Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht.

We confirm that this material meets the specification according to the mentioned standards.

Confirmamos que este material respeita as especificações de acordo com as normas referidas.

I29.K PP

216986

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION: ASTM A276 OR ASTM A240
M304B | T.TTT | X | WW.WWW |
| THICK | | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES
AND "WW.WWW" = WIDTH IN INCHES

△ EG. 0.5" X 3.0" BAR = M304B0.500X03.000
△ EG. 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED
2010-11-30

C	ADD VALUE TO PURCHASE MATERIAL, ADDED PLATE FROM 304/316 BAR TO 304/316 BAR/PLATE	MB	10.11.25
B	REFORMAT DWG ADD SPECS (ZN D6-1) REF PAR 04-0224	CP	09.07.15
A	NEW ISSUE	PH	05.06.10
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.25		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. M304B	REV. C
TITLE 304/316 BAR/PLATE	SHEET 1 OF 1
SCALE NTS	

COPYRIGHT © 2003 BY DART AEROSPACE LTD

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M30430.750x1.00
 DATE: 18/11/03

PO / BATCH NO.: P0041482/S124458

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12.5ft
 QUANTITY INSPECTED: 12.5ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750"
 THICKNESS RECEIVED: 0.750"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> N	ASTM A276
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	LT: 61055180
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>		SIGNED OFF BY: _____	
DATE: <u>18/11/03</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

BOLLINGHAUS[®] STEEL Bollinghaus Steel, SA DIN EN ISO 9001:2008 TÜV CERT No. 01 100 030458	Abnahmeprüfzeugnis/Mill Test Certificate/Certif. de Qualidade EN 10204:2004 / 3.1		No.: / Nr.: /Nr.: 0000143289													
	Unsere Innere Verweisung /Our int. Ref/ N/ ref int 5600041181 000230		Datum / Date / Data 26.06.2018													
Spezifikation / Standards / Normas TYPE 304/UNS S30400 and TYPE 304L/UNS S30403 acc. to ASTM A276/A276M-17, ASTM A182/A182M-18, ASTM A193/A193M-17, ASTM A479/A479M-18, ASTM A320/A320M-17a, ASTM A314-15, ASTM A262-15 Pract. E, AMS QQ-S-783D, AMS 5639J, AMS 5647K, ASME SA479/SA479M-2017, ASME SA276, ASME SA182/SA182M-2017, ASME SA193/SA193M-2017, ASME SA320/SA320M-2017, NACE MR0175-2015, execution as per ASTM A484/A484M-18.																
Kunde / Customer / Cliente		Endgültiger Kunde / Final Customer / Cliente Final														
Bestell Nr./Order Nr./ Enc.Nr. C115288		Bestell Nr./ Order Nr./ Enc.Nr. C115288.08														
Produktgruppe / Product Group / Grupo Produto AISI 304/L FLAT 1 X 1-1/4"		Gewicht / Weight / Peso 1.109 lb		Bunde / Bundle / Atados 01												
Werkstoff-Nr. Material-no. 1.4307 Qualidade		Werkstoff-Normbezeichnung / Material standard grade / Norma do material X 2 CrNi 18-9														
Beschreibung / Description / Descrição Stainless steel flat bars, hot rolled, heat treated, straightened and pickled. US DFAR 252.225-7009: MELT SOURCE: United Kingdom / MFG: Portugal.																
Schmelzen Nr. Cast nr. / Fusão nr.		Chemische Analyse in % / Chemical composition in % / Análise química em %														
56180563		C	0.021	Si	0.300	Mn	1.720	P	0.035	S	0.025	Cr	18.140	Ni	9.090	
EAF+AOD		Mo	0.460	Co	0.230	Cu	0.630	N	0.070	Ti	0.002	Al	0.006	-	-	
Proben Nr. Test no. Amostra no.	ASTM E399 Kerbschlagarbeit Impact Test Resiliência {Charpy V} { J }		Streckgrenze Yield point Tensão limite Rp 0.2 % [Ksi]		Dehngrenze 1% point Limite de extensão Rp 1.0% [Ksi]		Zugfestigkeit Tensile strength Tensão de rotura Rm [Ksi]		Dehnung Elongation Alongamento A5 [%]		4D [%]		Einschnürung Reduction of area Coef. Estricção Z [%]			
	3070811.01.01		220.0		46		53		85		54.4		57.6		68.0	
Visuelle Kontrolle Visual inspection Inspeção visual <input checked="" type="checkbox"/> Ok		ASTM E10 Härte Hardness Dureza 163 [HB]		ASTM A262 Practice E Korrosionsbeständigkeit IC Test Corrosão intermetálica <input checked="" type="checkbox"/> Ok		Wärmebehandlung Heat treatment Tratamento térmico Annealed Quenched 1900 °F (1050 °C) (water quenched)										
ASTM A484 Maßkontrolle Dimensional inspection Inspeção dimensional <input checked="" type="checkbox"/> Ok		ASTM E112 Korngröße Grain size Tamanho de grão 9		Abnahmebeauftragter Authorized Inspection Representative Inspector da Qualidade Vasco Ferreira (Q - VF)												
Verwechslungsprüfung Test of identity Teste de identificação <input checked="" type="checkbox"/> Ok		Makroskopische Untersuchung Macrographic test Material free from segregation defects. <input checked="" type="checkbox"/> Ok														
Bemerkungen / Remarks / Observações Country of origin: Portugal. No weld repair done. Material is free of mercury and radiation contamination.				Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht. We confirm that this material meets the specification according to the mentioned standards. Confirmamos que este material respeita as especificações de acordo com as normas referidas.												

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE
(NOTE: AISI 303 NOT ACCEPTABLE)

△ SPECIFICATION:
PART NUMBER: M304B | TTT | X | WWW | WWW |
| THICK | | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES
AND "WWW.WWW" = WIDTH IN INCHES

△ EG 0.5" x 3.0" BAR = M304B0.500X03.000
△ EG 0.5" X 12.0" PLATE = M304B0.500X12.000

RELEASED
2010-11-30

C	ADDED PLATE TO PURCHASE MATERIAL, ADDED PLATE RELATED SPECIFICATIONS, AND EG, CHANGED TITLE FROM 304/316 BAR TO 304/316 BAR/PLATE	MB	10.11.25
B	REFORMAT DWG. ADD SPECS (ZN D6-1); REF PART 08-020A	CP	09.07.15
A	NEW ISSUE	PH	05.06.10
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.11.25		

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	M304B
TITLE	304/316 BAR/PLATE
SCALE	NTS
SHEET 1 OF 1	REV. C

COPYRIGHT © 2002 BY DART AEROSPACE LTD
ALL RIGHTS RESERVED
DART AEROSPACE LTD
1175 WILSON AVENUE
HAWKESBURY, ONTARIO L0C 2A0
CANADA
TEL: 519-261-1111
FAX: 519-261-1112
WWW.DARTAEROSPACE.COM

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304B1.00x1.250
 DATE: 18/11/23

PO / BATCH NO.: P0041482 / S124459

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 13.92ft
 QUANTITY INSPECTED: 13.92ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"
 THICKNESS RECEIVED: 1.000"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<u>N</u>	
CORRECT FINISH	<u>Y</u>	N	
CORROSION	Y	<u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u>	N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u>	N	<u>ASTM A276</u>
CORRECT THICKNESS	<u>Y</u>	N	
PHOTO REQUIRED	Y	<u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u>	N	<u>HT: 56180563</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u>	N	
CORRECT M# ON THE MATERIAL	<u>Y</u>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/11/23</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**ACIER OUELLETTE INC.**

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

C000117771

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Customer N°

CL10001056

Date

2018/10/29

Delivery date**2018/11/09****Your order N°**

PO041482

Processed by

Denis Quenneville

Instruction F-M

Att : LUSSIER Tél.: (613) 632-5200 X 730

Delivery Route 5

Carrier

OUELLETTE VALLEYFIELD

Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 TUBE CHROMOLY 4130 0.500 X .083 NS TR4130-0500083 11747 5 x	37.00	400.00 165	PI		5 x						
AC21075-JG-18/11/08					21						
3 ROUND 4130 1/4 NS R4130-14 12111 2 x	4.01	24.00	PI \$CLB		2 x						
AC21083-ANI-18/10/31					12						

Note : ATTENTION: MILL TEST REQUIS**Conditions :**

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 41.01**NIR : R-109516-6**

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Date

Y M D

Y M D

Y M D

OUELLETTE

ACIER OUELLETTE INC.
 935, Boul. du Hâvre
 Salaberry de Valleyfield (Québec) J6S 5L1
 Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
 Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Order - Customer

CO00117771

Billed to

DART AEROSPACE LTD
 1270, ABERDEEN ST.
 HAWKESBURY, Ontario, K6A 1K7

F-M

Shipped to

1270, ABERDEEN ST.
 HAWKESBURY, Ontario, K6A 1K7

Att: PATRICK LUSSIER Tél.: (613) 632-5200 X 730

Delivery Route 5

Customer N°
 Date
 Delivery date
 Your order N°
 Processed by
 Salesman
 Carrier
 Credit Terme

CL10001056
 2018/10/29
2018/11/09
 P0041482
 Denis Quenneville

OUELLETTE VALLEYFIELD
 Net 30 Days

Product Description				Weight	Qty	UM	Credit Terme								
							PCS NB			Internal Use Only					
							CMD	EXP	B/O	IN	I	S	C	OUT	
1 TUBE CHROMOLY 4130 0.500 X .083 NS TR4130-0500083 5 x AC21075-J6-18/11/08 <i>Heat: 050168</i> ③ ROUND 4130 1/4 NS R4130-14 2 x 12111 AC21083-ANI-18/10/31							37.00	100.00	PI	0.00					
							4.01	24.00	PI_\$CLB	0.00					
							0.00								

Note : C: ATTENTION: MILL TEST REQUIS

Net 30 Days

Note: C: ATTENTION: MILL TEST REQUIS

Conditions:

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (LBS): 41.01

NIR: R-109516-6

Prepared By:	Verified By:	Delivered By:	Time	Customer's Signature	Y	M	D

HST
Total (\$CAD) 238.05
 Deposit 2 069.21
 Balance 0.00
2 069.21

CERTIFICATE OF TEST

CERTIFICAT D'ESSAIS

21075N

Page 01 of 02

Certification Date
8-NOV-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Invoice Number
T385665

AC00021075
PART NUMBER/NUMÉRO DE PIÈCE
140811

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIELD QC J6

Description: 4130 CDS TUBING AMS T 6736 COND N;
.500 OD X .083 W (.334 ID) X 17/24 R/L Line Total: 103.15 FT
HEAT: 25268 ITEM: 140811

Specifications:
AMS T 6736 B MIL T 6736 B AMS 6360 M
ASTM A450 ASTM E112 AMS 2640 J
ASTM E1444 AMS 2301 EN 10204 3.1/3.2 04

CHEMICAL ANALYSIS

C	MN	P	S	SI	CU	NI	CR
0.30	0.5900	0.0090	0.004	0.29	0.18	0.15	1.04
MO	AL	SN					
0.20	0.029	0.012					

RCPT: R546854

COUNTRY OF ORIGIN : USA

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR PSI	ULT TEN PSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS RC
	99000.0	107800.0	19.0		27

GRAIN SIZE : 8 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.
The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession./Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPRES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CERTIFICATE OF TEST

CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date
8-NOV-2018

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

AC00021075

Invoice Number
T385665

PART NUMBER/NUMÉRO DE PIÈCE
140811

SOLD TO:	ACIER OUELLETTE INC.	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD	EXPÉDIÉ À:	DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIELD QC J6S 5L1

Description: 4130 CDS TUBING AMS T 6736 COND N;
.500 OD X .083 W (.334 ID) X 17/24' R/L

Line Total: 103.15 FT

HEAT: 25268

ITEM: 140811

DECARB: OK
AMS NO :2301
SEVERITY :0.0
FREQUENCY:0.0

COMMENTS

melt/mfg usa

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du fabricant après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with persons while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

JOANNE DESPES



MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 4130N SEAMLESS STEEL TUBING
 SPECIFICATION: MIL-T-8736 OR AMS 6371 6360 6301 6302 6373 6374
 PART NUMBER: M4130N TD.DDD W.TTT
 WHERE: "D.DDD" = OUTER DIAMETER (IN INCHES)
 AND "TTT" = WALL THICKNESS (IN INCHES)

EG. 3/4" TUBING WITH .035" WALL = M4130NT0.750W.035

RELEASE
 2012-04-16

REV. B		RT. O. MAT DWG TO ACCOMMODATE ADDITIONAL TUBE DIAM. ENDS AND WALL THICKNESS		RP	12.04.02
A		NEW ISSUE		JB	01.05.16
REV		DESCRIPTION		BY	DATE
DESIGN	JB	DART AEROSPACE LTD			
DRAWN	RP	HAWKESBURY, ONTARIO, CANADA			
CHECKED	AP	DRAWING NO.			
MFG APPR.	AP	M4130N-T			
APPROVED	AP	TITLE			
DE APPR.	AP	STEEL TUBING			
DATE	12.04.02	SCALE			
		NTS			

COPYRIGHT © 2004 BY DART AEROSPACE LTD
 THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4130N70.500W.D83

PO / BATCH NO.: P004/482/5130961

DATE: 18/11/23

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.500"

QUANTITY RECEIVED: 105 Lt

THICKNESS RECEIVED: 0.500"

QUANTITY INSPECTED: 105 Lt

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	AMS 6360
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	117: 25268
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/23</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mt: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mt: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

Copy

CO00117775

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Customer N°

CL10001056

Date

2018/10/29

Delivery date

2018/11/02

Your order N°

PO041482

Processed by

Denis Quenneville

Instruction F-M

Att : LUSSIER Tel.: (613) 632-5200 X 730

Delivery Route 5

Carrier

OUELLETTE VALLEYFIELD
Net 30 Days

Product Description

Weight

Qty

UM

PCS NB

CMD

EXP

B/O

IN

I

S

C

OUT

1 ALU PLATE 1 6061-T651 RANDOM

PAL-16061-V

4249

1.81 P12_\$CLB

1 PCS 3.625" X 72"
HEAT 14-7508

2 ALU PLATE 2 6061-T651 RANDOM

PAL-26061-V

7470

2.25 P12_\$CLB

1 PCS 2.25" X 144"
HEAT 70202095

3 PLATE ALU 7/8 6061-T6 RANDOM NS

PAL-786061-V

12087

2.25 P12_\$CLB

1 PCS 2.25" X 144"
HEAT 14-7336

AC21077-THY-18/11/01

Note : ATTENTION: MILL TEST REQUIS

Conditions : Total Weight (lbs) : 118.82

NIR : R-109516-6

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Date



INSPECTION CERTIFICATE № 18.113162

EN 10204 - 3.1

Consigner: KAMENSK URALSKY METALLURGICAL WORKS S, Zavodskaya Str., Kamensk Ural'sky, Sverdlovsk Region, 623405, Russia Tel: +7 (3438) 39 54 17 Fax: +7 (3439) 39 52 49											
Buyer:					Quantity, pcs: 5						
Consignee:					Net Weight, kg: 1048						
P.O. No: 5400388906-C1A					S.O. No: N17694						
Article No: ALFLR00945 Item 0070					Rm No: 17						
					Package No: 733757						
Description of Goods: Plates											
Grade of Product			Dimensions, inch (mm)			Requirements on the Products:					
			0.875"X60.5"X144.5" 22.225X1536.7X3670.3			Material conforms to quality of alloy: 6061 T651					
Product conforms to all requirements of: ASME SB-209 Section II Part B (2010); ASTM B209-14; SAE AMS-QQ-A-250/11A (2008); SAE AMS 4027 Rev. N (2014). This product conforms to European Union RoHS Directive 2011/65/EU											
Mechanical Properties											
The Condition of Tested Specimens	Lot No.	Heat No.	HT Charge No.	Sampling direction	Tensile Strength, Rm / Cut		Yield Strength, Rp0.2% / Clothing test		Elongation, %		Hardness, HBW
					min	max	min	max	min	max	
Required				LT	42.0	-	35.0	-	9	-	-
	855114	14-7338	-	LT	42.0	42.2	38.5	38.7	11.9	13.6	-
Chemical Composition, %											
Element	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr	Zinc Zn	Titanium Ti			
Required	0.40 - 0.6	0.7	0.15 - 0.40	0.15	0.8 - 1.2	0.04 - 0.35	0.25	0.15	-	-	-
Conforms	0.60	0.30	0.17	0.07	1.0	0.05	0.08	0.08	-	-	-
Element									Other Elements		Aluminum Al
Required	-	-	-	-	-	-	-	-	Each	Total	Aluminum Al
Conforms	-	-	-	-	-	-	-	-	0.05	0.15	Remainder
	-	-	-	-	-	-	-	-	0.05	0.15	Remainder
Other Tests											
Method	Macro- structure	Micro- structure	UT	Kic	Electro- conductivity, IACS%	SCF	Contents H2 of multiple coils/100gr	Raw material used for manufacturing supplied products was tested for compliance with international radiation safety regulations during incoming inspection. Russia is country of melt and manufacture. No Weld Repair.			
Result	-	-	-	-	-	-	0.25				

On behalf:

KUMZ J.S.Co.

Date:

02.04.2018

QC Inspector

Zyryanova K.V.

Inspection Department Engineer

Alehina N.V.



The Certificate has been signed electronically.

Form № QAD/3-003, Revision 03

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE
SPECIFICATION:
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS-4925-QR-4027
OR ASTM B209

PART NUMBER: M6061T6S XXXX W.WWWW
THK WIDTH

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W.WWWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)
EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500
XXX BY 4FT BY 8FT FOR SHEET

PREFERRED SIZE:

2018 MAR 13
18-045

APPROVED

C	ADD PLATE AND T651 SPEC	ML	17.12.13
B	REFORMAT DWG, ADD B209 SPEC (ZN D6-1), REF PAR 08-020A	CP	09.07.13
A	NEW ISSUE	RF	01.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6S			
TITLE 6061-T6 SHEET/PLATE SPEC			
REV. C			
SHEET 1 OF 1			
SCALE			
NTS			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T650-875x2.250

PO / BATCH NO.: P0041482/S124460

DATE: 18/11/03

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.875"

QUANTITY RECEIVED: 12ft

THICKNESS RECEIVED: 0.90"

QUANTITY INSPECTED: 12ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y	N	
CORROSION	Y	<input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y	N	<u>ASPM 8209</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y	N	<u>MT: 14-7386</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/03</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



INSPECTION CERTIFICATE № 10.124745

EN 10204 - 2.1

Consignor: KAMENSK URALSKY METALLURGICAL WORKS 8, Zavodskaya Str., Kamensk-Uralsky, Sverdlovsk Region, 623405, Russia Tel: +7 (3438) 39 54 37 Fax: +7 (3438) 39 52 49				JOINT STOCK COMPANY							
Buyer:				Quantity, pcs: 5							
Consignee:				Net Weight, kg: 1278							
P.O. No: 5400397595-C1A				S.O. No: N17830							
Article No: ALFLR00345 Item 0030				Item No: 13							
				Package No: 732237							
Description of Goods: Plates				Requirements on the Product:							
Grade of Product		Dimensions, inch (mm)		Material conforms to quality of steel: 0851 T851							
		1"x18.6"x36.6" 25.400x1291.9x2451.1		Product conforms to all requirements of: ASTM B209-14; SAE AMS-QQ-A-255/1A (2008); SAE AMS 4027 Rev. N (2014); ASME SB-209 Section II Part B (2010). This product conforms to European Union RoHS Directive 2011/65/EU							
Mechanical Properties											
The Condition of Tested Standards	Lot No.	Heat lot No.	HT Charge No.	Sampling direction	Tensile Strength, Rm / CUL, ksi		Yield Strength, Rp0.2% / Cenching test, ksi		Elongation, %		Hardness, HBW
					min	max	min	max	min	max	
Required	057423	14-7508		LT	42.0		35.0		9		
				LT	48.5	44.5	40.8	40.8	16.0	16.0	
Chemical Composition, %											
Element	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr	Zinc Zn	Niobium Nb			
Required	0.40 - 0.8	0.7	0.15 - 0.40	0.16	0.8 - 1.2	0.04 - 0.35	0.25	0.15			
Contents	0.65	0.33	0.20	0.08	1.1	0.05	0.09	0.05 - 1.09			
Element									Other Elements		Aluminum Al
									Each	Total	
Required									0.05	0.15	remainder
Contents									0.05	0.15	remainder
Other Tests											
Method	Macro-structure	Micro-structure	UT	NDE	Electro-conductivity, IACS%	SCF	Contents H2 of metals, cm3/100g	Raw material used for manufacturing supplied products was tested for compliance with international radiation safety regulations during incoming inspection. Russia is country of melt and manufacture. No weld repair.			
Result	-	-	-	-	-	-	MAX 0.25				

On behalf:

Date:

QC Inspector

Inspection Department Engineer

KUMZ J.S.Co.

16.09.2018

Hayalina N.A.

Akhina N.V.



This Certificate has been signed electronically.

Form № QAD/3-099, Revision 03

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE

SPECIFICATION:
QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS-4025 OR 4027
OR ASTM B209

△ PART NUMBER: M6061T6S | XXX | X | W.WWW |
THK | WIDTH |

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)

EG. 0.063" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

△ PREFERRED SIZE: .XXX BY 4FT BY 8FT FOR SHEET

C	ADD PLATE AND T651 SPEC	ML	17 12 13
B	REFORMAT DWG. ADD B209 SPEC (ZN D6-1). REF PAR 08-020A	CP	09 07 13
A	NEW ISSUE	RF	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	ML	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	CHECKED	NO	DRAWING NO
MFG. APPR.	JFS	M6061T6S	REV. C
APPROVED	HS	TITLE	SHEET 1 OF 1
DE APPR.	CP	6061-T6 SHEET/PLATE SPEC	SCALE
DATE	17.12.13	NTS	

2018 MAR 13

2018 MAR 13

APPROVED

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T651-1000x3.625
 DATE: 18/11/03

PO / BATCH NO.: P0041482/5124461

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 6ft
 QUANTITY INSPECTED: 6ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"
 THICKNESS RECEIVED: 1.000"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	<u>ASTM A209</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	<u>HT: 14-7508</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AM</u> DATE: <u>18/11/03</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

CO00117779

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Instruction F-M

Att : LUSIER Tél.: (613) 632-5200 X 730

Delivery Route 5

Customer N° CL10001056
Date 2018/10/29
Delivery date 2018/11/02
Your order N° P0041482
Processed by Denis Quenneville
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terme Net 30 Days

Product Description				Weight		qty		UM		Credit Terme				Net 30 Days			
1 ALU PLATE 2 1/2 6061-T651 RANDOM PAL-2126061-V 7461 1 PL 7" X 48" Heat: 321 AC21072-RM-18/10/31				83.41		2.33		PI2_\$CLB		PCs NB				Internal Use Only			
										CMD		EXP		B/O		IN	
										1x 7" X 4"							
Note : ATTENTION: MILL TEST REQUIS																	

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (lbs) : 83.41

NIR : R-109516-6

Prepared By :	Verified By :	Delivered By :	Time
Customer's Signature		Date	

PLC

Best in Class

CERTIFIED TEST REPORT

8

CUSTOMER PO NUMBER: C75048-4		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD: 104144/9	GOV'T CONTRACT NUMBER:	
KAISER ORDER NUMBER: 1248095-4		SHIP DATE: 01/02/2018	ALLOY: 6061	CLAD: BARE	TEMPER: T651	PRODUCT DESCRIPTION: KaiserSelect Precision Plate	
WEIGHT SHIPPED: 5260 LB	QUANTITY: 3 PCS EST.	TRUCK B/L #: 2071024	GAUGE: 63.5000 MM		DIAMTER/WDTH: 1232.0 MM	LENGTH: 3670.3 MM	

MHU 2173112: LOT 246869B2: 2 pieces *0931/67*
MHU 2173114: LOT 246869B2: 1 pieces *0931/68*

Certified Specifications

AMS 4027/RevN-ASME SB 209/Rev2010-ASTM B 209/Rev14

Test Code: 1511

Test Results:

Plant Serial: 4491751

Order Number: 1248095

Line Item: 4

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (6061-T6/T62/T651) ALUMINUM SHEET OR PLATE
SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS-4025 OR 4027
OR ASTM B209

PART NUMBER: M6061T6S XXX X W WWW
THK WIDTH

WHERE "XXX" = THICKNESS (IN INCHES)
AND "W.WWW" = WIDTH (IN INCHES, OPTIONAL, FOR SPECIFYING CUT PLATE)
EG. 0.003" THICK SHEET = M6061T6S.063
EG. 3.5" WIDE BY 0.500" THICK PLATE = M6061T6S.500X3.500

PREFERRED SIZE: XXX BY 4FT BY 8FT FOR SHEET

2018 MAR 13
2018-03-13

APPROVED

C	ADD PLATE AND T651 SPEC	ML	17.12.13
8	REFORMAT DWG. ADD B209 SPEC (ZN DB-1).	CP	09.07.13
A	NEW ISSUE	RT	01.06.06
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	ML		
CHECKED	NO		
MFG. APPR.	JFS		
APPROVED	HS		
DE APPR.	CP		
DATE	17.12.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6S			
REV. C			
SHEET 1 OF 1			
TITLE 6061-T6 SHEET/PLATE SPEC			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 2.500 x 7.000
 DATE: 18/11/05

PO / BATCH NO.: P0041482 / 5124462

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 444
 QUANTITY INSPECTED: 444
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 2.500"
 THICKNESS RECEIVED: 2.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM B209
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	44.221
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AK</u> DATE: <u>18/11/05</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT

CO00117777

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : LUSSIER Tél.: (613) 632-5200 X 730

Instruction F-M

Delivery Route 5

Customer N°

CLI0001056

Date 2018/10/29

Delivery date 2018/11/01

Your order N° PO041482

Processed by Denis Quenneville

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 FLAT ALU 1 1/2 X 2 1/2 6061-T6 * FAL-112212 2439 3 X 12' Heat: 32247 H AC21103-SA-31/10	158.62	36.00	PL \$CLB		3x 12					

Note : ATTENTION: MILL TEST REQUIS

Conditions :

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 158.62

NIR : R-109516-6

Prepared By : JQ

Verified By : Jm

Delivered By : Vd

Time

Y M D
10 11 02

Date

Customer's Signature

Pic

117777

Dart

21103N

MILL TEST

CERT CODE: 9		DIE NUMBER S 4660		DATE OF SHIPMENT Sep/12/2018		MANIFEST NO. 221014 - 13 397777	
CUSTOMER PO C76056		ALLOY 6061		TEMPER T6511		SALESMAN PETER BASHMAKOV	
CUSTOMER PART NUMBER V836661		PART DESCRIPTION 2.5 x 1.5 FB		CERIFICATION ASTM B221-14 - AMS QQA 200/8		MADE IN CANADA	

Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell E	Conductivity
A.11	6061	Sep/07/2018	47.00	43.40	12.50	88.0, 88.4, 88.9	

Chemical Composition

Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
73244	A.11	6061	0.632	0.234	0.205	0.093	0.88	0.052	0	0.036	0.02	0	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.

Grant Jardine
Plant Manager

Heat: 73244

Best in Class

CERTIFIED TEST REPORT

LOT: 246869B2 CAST: 221 DROP: 01 INGOT: 1

Melted in USA
(ASTM E8/B557)
(EN 2002-1)

Tensile: Temper	Dir/#Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
T651	LT / 03 (Min:Max)	48.8 : 49.2 (336 : 339)	43.4 : 44.0 (299 : 303)	14.0 : 14.5

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.77	0.5	0.29	0.15	1.1	0.18	0.11	0.02	0.01	0.00	TOT 0.03

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
6061 MIN	0.40	0.0	0.15	0.00	0.8	0.04	0.00	0.00	0.00	0.00	MAX 0.05
6061 MAX	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.05	TOT 0.15

Aluminum Remainder

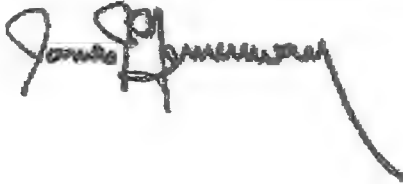
Miscellaneous Notes

6061 sheet or plate certified to AMS 4025, AMS 4026, or AMS 4027 also meets applicable requirements of cancelled specification AMS-QQ-A-250/11, Rev. A.

CERTIFICATION

Aluminum, Trentwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order: * has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein. All test equipment and measuring devices are calibrated and certified in accordance applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture. * was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content. * has been thermally processed in compliance with AMS 2772, where applicable. * is mercury free, within the limits of detection of ASTM E1215 (<1ppm). * is in compliance with RoHS 2, European Union Directive 2011/65/EU. * is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates. * is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act. * is free of weld repair. * meets the reporting requirements of EN10204, Type 3.1. Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

JAMES HEMENWAY, LABORATORIES SUPERVISOR



Plant Serial: 4491751
Order Number: 1248095
Line Item: 4

cast 221

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
 SPECIFICATION: QLA-225/B OR AMS-QQ-A-225/B (OR AMS 4117/4128/4115/4116)
 OR QLA-200/B OR AMS-QQ-A-200/B (OR AMS 4160)
 OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WWW.WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
 "WWW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED
 2009-05-03
MD

B		REMOVE QLA-250/1, OPTION REFORMAT NOTE S. ADD ASTM B211B21 (2N D7-1)		CP	09 07 13
A		NEW/SSUF		DS	01 06 08
REV		DESCRIPTION		BY	DATE
DESIGN	DS	DART AEROSPACE LTD			
DRAWN	<i>AS</i>	DRAWING NO		REV. B	
CHECKED	<i>AS</i>	M6061T6B		SHEET 1 OF 1	
MFG. APPR	<i>AS</i>	TITLE		SCALE	
APPROVED	<i>AS</i>	6061-T6 BAR		NFS	
DE APPR	<i>AS</i>	DATE		09.07.13	
COPYRIGHT © 2001 BY DART AEROSPACE LTD					

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MG6176B2-500x1.500
 DATE: 18/11/03

PO / BATCH NO.: P0041482 / 5124463

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 3644
 QUANTITY INSPECTED: 3644
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"
 THICKNESS RECEIVED: 1.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> N	<u>ASTM B221</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	<u>LIT: 73244</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AI</u> DATE: <u>18/11/03</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

**ACIER OUELLETTE INC.**

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

DELIVERY - CLIENT**Copy**

C000117778

Billed to

DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Att : LUSSIER Tél.: (613) 632-5200 X 730

Instruction

F-M

Delivery Route

5

Customer N°

CLI0001056

Date

2018/10/29

Delivery date**2018/11/01****Your order N°**

PO041482

Processed by

Denis Quenneville

Salesman

OUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Credit Terme

Net 30 Days

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only			
				CMD	EXP	B/O	IN	I	S	C
1 ROUND 4140 HEAT TREAT 7/8 (R) R4140-78H 1 X Heat : M55997 <i>AT</i>	40.90	20.00	PI_\$CLB		11201					
2 ROUND 4140 HEAT TREAT 2 3/4 (R) R4140-234H 1 X 15' Heat : 506297 <i>AT</i>	316.95	15.00	PI_\$CLB		15		24' 2"	✓		
transit 580 31/10										9' 2"

Note : ATTENTION: MILL TEST REQUIS**Conditions :**

All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (Lbs) : 357.85**NIR : R-109516-6**

Prepared By :

Verified By :

Delivered By :

Time

Y M D
18 11 02

Customer's Signature

Date

Eaton Steel Bar Company Inspection Certificate 1696552

EN 10204:2004-3.1

Customer	BOL	Ship Date	Customer PO	Item	Customer Item	Item Description
	224436	30-Jan-2018	B39274	11141 rev 003	502241	7/8 HR RD4140/42MM 20H2In SBQ QTSF FG MST

All bundles listed below were produced using steel from Heat M55997 issued by GERDAU-MONROE and were completed from Eaton Steel Job 808640.

Chemistry	Description	Value	Units	Mechanical	Description	Value	Units
C	Carbon	0.41000	PWGT	TENSILE PSI	Tensile Strength in PSI Units		PSI
Mn	Manganese	0.88000	PWGT	YIELD PSI	Yield Strength in PSI Units		PSI
P	Phosphorus	0.01900	PWGT	ELONGATION	Percent Elongation		PCT
S	Sulfur	0.01800	PWGT	REDUCTION	Percent Reduction in Area		PCT
Si	Silicon	0.26000	PWGT	BRINELL SURF	Brinell Surface	101.0	BRN
Ni	Nickel	0.13000	PWGT	Heat Treating	Description	Value	Units
Cr	Chromium	0.98000	PWGT	TEMPER TEMP F	Temper Temp in Fahrenheit	500 - 2500	DEGF
Mo	Molybdenum	0.16000	PWGT	AUSTEN TEMP F	Austenitize Temp in Fahrenheit	1600 - 1700	DEGF
Al	Aluminum	0.01800	PWGT	SR TEMP F	Stress Relief Temp in Fahrenheit	500 - 2500	DEGF
Cu	Copper	0.22000	PWGT	MAGNETISM-RT	Magnetism in Gauss	0 - 20	GN
V	Vanadium	0.00300	PWGT	TIME AT TEMP	Time at Temperature	Report	
Cb	Columbium	0.00300	PWGT	QUENCH MEDIA	Quench Media Requirements	P&W/O	
N	Nitrogen	0.00650	PWGT	STRESS FREE	Cert stress free	CERTIFIED	
P+S	Element Sum Limit	0.03700	PWGT	H74140-420T	Quench & Temper	CONFORMS	
DI	Ideal Diameter	5.26000	IN	Mill Processing	Description	Value	Units
Cleanliness	Description	Value	Units	MELT COUNTRY	Melted in Country	USA	
MACRO ETCH	Report macro etch results.	Value	Units	ROLLED COUNTRY	Rolled in Country	USA	
Geometry	Description	Value	Units	RED RATIO	Reduction Ratio	59.90	RED
DIAMETER	Diameter	0.8670 - 0.8830	IN	ASTM Standard	Description	Value	Units
Jominy	Description	Value	Units	A193/193M-01	Grade B7	CONFORMS	
J1	1/16 inch from Quenched End	57	HRC	A434-90a-BC	ASTMA BC Tensile and Yield properties	CONFORMS	
J2	2/16 inch from Quenched End	57	HRC	Structure	Description	Value	Units
J3	3/16 inch from Quenched End	57	HRC	PERCENT TM	Percent Tempered Martensite	80 - 100	PCT
J4	4/16 inch from Quenched End	57	HRC	MICROSTRUCTURE	Reported Microstructure	TM	
J5	5/16 inch from Quenched End	57	HRC	Tag Number		Length	
J6	6/16 inch from Quenched End	57	HRC	022-2188194	Qty Units	20ft	
J7	7/16 inch from Quenched End	56	HRC		4025 LBS		
J8	8/16 inch from Quenched End	55	HRC				
J9	9/16 inch from Quenched End	54	HRC				
J10	10/16 inch from Quenched End	52	HRC				
J11	11/16 inch from Quenched End	50	HRC				
J12	12/16 inch from Quenched End	48	HRC				
J14	14/16 inch from Quenched End	46	HRC				
J16	16/16 inch from Quenched End	45	HRC				
J18	18/16 inch from Quenched End	44	HRC				
J20	20/16 inch from Quenched End	42	HRC				
J22	22/16 inch from Quenched End	40	HRC				
J24	24/16 inch from Quenched End	38	HRC				
J28	28/16 inch from Quenched End		HRC				
J32	32/16 inch from Quenched End		HRC				

Bundle tags with Eaton Steel identifiers reference the steel grade, heat, purchase order number where applicable, part number, product description and quantity. Material produced in accordance with Eaton Steel's Quality Manual OM-00002 Rev 0 dated 11/21/2013.

We hereby certify the above to be in conformance, and a true copy of data represented in company records. This steel was not subject to weld repair or exposed to mercury while in the possession of Eaton Steel.

Created on 30-Jan-2018
Marc Benjamin, Corporate Metallurgist

This document was prepared by means of electronic data processing and is valid without signature

10221 Capital Avenue, Oak Park, MI 48237 USA
http://www.eatonsteel.com

Tel: 248-398-3434
Fax: 248-398-1434



Vulcan Threaded Products
10 Cross Creek Trail
Pelham, AL 35124
Tel (205) 620-5100
Fax (205) 620-5150

JOB MATERIAL CERTIFICATION

Job No: 388939

Job Information

Certified Date: 10/21/14

Containers: S8899057 S8900817 S8905945 S8908239

Customer: Eaton Steel Corporation

20601 Trolley Industrial
Drive
Ship To: Taylor, MI 48180

Customer Part No: 1013442-001

Customer PO No: 148089-765527

Shipped Qty: 30223 lbs

Order No: 229406

Line No: 1

Note: **W6 765527**

Applicable Specifications

Type	Specification	Rev	Amend	Option
Heat Treat	A434-90a-BC	2009		
	ASTM A193 B7/ASME SA193 B7	2010a		
	Customer Specification			

Test Results

See following pages for tests

Certified Chemical Analysis

Heat No: M55997										Origin: USA			
C	Mn	P	S	Si	Cr	Mo	Ni	V	Cu				
0.410	0.88	0.019	0.018	0.26	0.98	0.16	0.13	0.003	0.22				
Al	Nb	Sn	N	PR	Macro S	Macro R	Macro C	D					
0.018	0.003	0.011	0.0065	59.9:1	1	1	1	5.26					

Notes

Material was manufactured, tested and inspected in accordance with Vulcan Threaded Products Inc. Quality Assurance Program and Manual Rev. A, dated 8/23/11. Processed material is Quenched and Tempered - Stress Free. No weld repair performed on the material. No Mercury used in the production of this material. Melted and Manufactured in the USA.

Average Gauss Reading: <15

The microstructure is greater than 80% martensite from surface to the center

Test specimens meet the ASTM A370-12a specifications

cert 388098



Vulcan Threaded Products
10 Cross Creek Trail
Pelham, AL 35124
Tel (205) 620-5100
Fax (205) 620-5150

JOB MATERIAL CERTIFICATION

Job No: 388939 Job Information Certified Date: 10/21/14
Containers: S8899057 S8900817 S8905945 S8908239

Test Results

Part No: HRB 4140 .875x240 Q&T ES

Test No: 30480 Test: Quench & Temper Physicals (KSI)

Description	Tensile (ksi)	Yield 0.2% Offset (ksi)	Elongation (%)	Elongation Gage Length	ROA (%)	Midradius Hardness	Surface Hardness	Center Hardness	Hardness Test Type	Note
	148.0	132.5	19.5	4D	55.0	31.7	32.2		HRC	

Test No: 30479 Test: Quench & Temper Information (Lbs)

Description	Tempering Temp (F)	Run Speed (F/min)	Quench Water Temp (F)	Note
Quench & Temper Information Results	1,304	39.50	81.1	

Casie W. Nathe
Nathe, Casie - Lab Secretary

10/21/14

Date



GERDAU SPECIAL STEEL NORTH AMERICA
5591 MORRILL ROAD
JACKSON, MICHIGAN 49201

CERTIFIED MATERIAL TEST REPORT

CUSTOMER ORDER NUMBER	CUSTOMER PART NUMBER	HEAT NUMBER	WORK ORDER NUMBER	DATE
148088	1012470/4140EFVD	M55997	291125 101	8/11/14

Danieli Cast

REPORT TO

SHIP TO

ORDERED

GRADE	SIZE	LENGTH
4140EFVD	0 7/8" RND	20' 2"

CUSTOMER SPECIFICATIONS

ITEM 1012470 REV 1 DTD 3/7/12; A29/A29M-12; A322-07

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Ni	Cr	Mo	Cu	Sn	Al
0.41	0.88	0.019	0.018	0.26	0.13	0.98	0.16	0.22	0.011	0.018
V	Nb	N								
0.003	0.003	0.0065								

GRAIN SIZE SPECIFICATION ASTM E112 FINE GRAIN 5-8

HARDENABILITY SPECIFICATION ASTM A255/A304

THEORETICAL

J1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	20	22	24	26	28	30	32	34
57	57	57	57	57	57	56	55	54	52		50		48		46	45	44		42		40		38	

DI CALCULATION SPECIFICATION CAT 1E0024

5.26

REDUCTION RATIO SPECIFICATION ITEM 1012470

RATIO= 59.9 TO 1.0

PAGE 1

We certify that these data are correct and in compliance with specified requirements.

Gerdau Monroe
3000 East Front Street
Monroe, MI 48161

Wendy J. Craig
Wendy J. Craig
Quality Assurance Representative

CONTINUED ON PAGE 2

Heat M55997



GERDAU SPECIAL STEEL NORTH AMERICA
5591 MORRILL ROAD
JACKSON, MICHIGAN 49201

CERTIFIED MATERIAL TEST REPORT

CUSTOMER ORDER NUMBER	CUSTOMER PART NUMBER	HEAT NUMBER	WORK ORDER NUMBER	DATE
148088	1012470/4140EFVD	M55997	291125 101	8/11/14

Danieli Cast

REPORT TO

SHIP TO

ORDERED

GRADE	SIZE	LENGTH
4140EFVD	0 7/8" RND	20' 2"

CUSTOMER SPECIFICATIONS

ITEM 1012470 REV 1 DTD 3/7/12; A29/A29M-12; A322-07

RESIDUAL MAX SPECIFICATION ITEM 1012470

P+S = 0.0370

RESIDUAL MIN SPECIFICATION ITEM 1012470

P+S = 0.0370

ASTM E381 MACRO ETCH SATISFACTORY: S1/R1/C1

** MATERIAL 100% MELTED AND MANUFACTURED IN THE U.S.A. BY THE ELECTRIC ARC FURNACE AND CONTINUOUS CASTING METHOD. THE PRODUCT HAS NOT BEEN REPAIRED BY WELDING AND THIS MATERIAL HAS NOT BEEN EXPOSED TO MERCURY OR TO ANY OTHER METAL ALLOY THAT IS LIQUID AT AMBIENT TEMPERATURES DURING PROCESSING OR WHILE IN OUR POSSESSION. GERDAU MONITORS ALL INCOMING SCRAP AND ALL HEATS OF STEEL TO ENSURE THAT PRODUCTS SHIPPED ARE FREE OF RADIOACTIVE MATERIAL.

PAGE 2 OF 2

We certify that these data are correct and in compliance with specified requirements.

Gerdau Monroe
3000 East Front Street
Monroe, MI 48161


Wendy J. Craig
Quality Assurance Representative

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-41402T-R0875
 DATE: 18/11/13

PO / BATCH NO.: P0041482/S124464

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 2016
 QUANTITY INSPECTED: 2016
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.875"
 THICKNESS RECEIVED: 0.875"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	<u>ASIM 4143</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	<u>HT: MSS977</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/11/13</u>	SIGNED OFF BY: <u>Ken Kit</u> DATE: <u>13-Nov-2018</u>

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFICATE OF COMPLIANCE / CERTIFICAT DE CONFORMITÉ

Order No. / No. Commande	CUSTOMER / CLIENT	Packing slip / No. d'expédition	DATE
Order No. / No. Commande	CUSTOMER / CLIENT	Packing slip / No. d'expédition	DATE
AC00021111	ACIER OUELLETTE INC	L54850-01	30-10-18
MATERIAL ID# / No. MATÉRIEL	GRADE / NUANCE	HEAT TREATMENT / TRAITEMENT THERMIQUE	HEAT / COULÉ
2018-1693	AISI 4140	Q.T.S.R / TREMPÉ REVENU - RECUIT DE DÉTENTE (RONDS)	506297
SHAPE / FORME	SIZE / DIMENSION	SPECIFICATIONS	
Round / Rond	2.750" in.	ASTM A193/193M-01, A434-90a-BC	
PAYS D'ORIGINE: U.S.A.			

CHEMICAL COMPOSITION / ANALYSE CHIMIQUE

	Carbon (C)		Silicon (Si)		Manganese (Mn)		Phosphorus (P)	
	mini/maxi		mini/maxi		mini/maxi		mini/maxi	
actuel (%):	0.380	0.430	0.150	0.350	0.750	1.000	0.035	
	0.410		0.220		0.870		0.019	
	Sulfur (S)		Chromium (Cr)		Nickel (Ni)		Molybdenum (Mo)	
	mini/maxi		mini/maxi		mini/maxi		mini/maxi	
actuel (%):	0.040		0.800	1.100	0.000	0.250	0.150	0.250
	0.021		0.849		0.098		0.162	
	Copper (Cu)		Vanadium (V)		Aluminium (Al)		Tungsten (T)	
	mini/maxi		mini/maxi		mini/maxi		mini/maxi	
actuel (%):	0.350		---	---	---	---	---	---
	0.250		0.029		0.003		0.000	

MECHANICAL PROPERTIES / PROPRIÉTÉS MÉCANIQUES

Yield strength / Élasticité	Tensile / résistance à la traction	Elongation / allongement (%)	Reduction of area / surface (%)	Hd/dure surface
98,900	120,200	20.0%	55.0%	270 BHN

No weld repairs performed during the manufacturing of this product. We hereby certify that the above results have been verified and conform to the above mentioned specifications. Material is Mercury free, without radioactivity.

Aucune réparation exécutée par soudure durant la fabrication de ce produit. Par la présente nous attestons que les résultats ci-haut mentionnés ont été vérifiés et sont conformes aux spécifications. Pas de contact au Mercure, sans radioactivité.

Keith BALL - Branch Manager

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140QT-R2.750

PO / BATCH NO.: P0041482/S124465

DATE: 18/11/13

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 2.750"

QUANTITY RECEIVED: 154

THICKNESS RECEIVED: 2.750"

QUANTITY INSPECTED: 154

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	ASTM A193
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	HT: 506297
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/11/13</u>	SIGNED OFF BY: <u>[Signature]</u> DATE: <u>13 Nov 2013</u>

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

DELIVERY - CLIENT



CO00117760

Product Description	Qty	Weight	UM	PCS NB		Internal Use Only			
				CMD	EXP	B/O	IN	I	S C
17 ANGLE ALU 1 X 1 X 1/8 R 6061-T6 * AAL-1118 1301 1 X 20' Heat (SKF180280) AT	5.62	20.00	PL_SCLB		1 X 20'				
18 ROUND 4130 HEAT TREAT 4 (R) R4140-4H 4965 1 X 4' Heat (C149271) AT	176.28	4.00	PL_SCLB		1 X 4'				
19 ROUND CR 6 1018 (R) RCR-6 5354 1 X 2' Heat (170249) AT	192.26	2.00	PL_SCLB		1 X 2'				
20 PLATE 44W 5/8 RANDOM P44-58-V 4128 1 PL 4' X 4' 69130A AT	408.00	16.00	PL2_SCLB		1 X 4'				
21 ROUND SS 3/4 17-4PH NS RSS-34174 9268 2 X Heat (9560264-GS011) AT	36.05	24.00	PL_SCLB		2 X 17 1/2'				

Note : ATTENTION: MILL TEST REQUIS

Total Weight (Lbs) : 2 149.61 NIR : R-109516-6

Conditions : All sold and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashless. All tool materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Not 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document endorsed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : 	Verified By : 	Delivered By : _____	Time _____
Customer's Signature _____			Date _____

#5354

RCR-6-V

47916

Macsteel Bright Bar

A division of

Macsteel Service Centers SA (Pty) Limited

Reg No. 2005/016292/07 Vat No. 4430554206

P.O. Box 120 Meyerton 1960

Seymour Road, Industrial Sites, Meyerton

South Africa



BRIGHT BAR

12-Sep-17

49096

CHEMICAL ANALYSIS CERTIFICATE

TO:

LES ACIERS TRANSBEC (1997) LTEE

6 " 152.40MM C1018

PO # CA47916 LOT4 REF 170647C ASTM A1018 - 13

CAST No.	C. %	Si. %	Mn. %	S. %	P. %	Pb. %
1702492	0.160	0.250	0.720	0.003	0.014	

S. No. 101

On behalf of Macsteel Bright Bar

01:02 PM

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
B	REMOVED LENGTH AND WIDTH DIMENSIONS	17-675	26/09/2017	SAC	WM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

SPECIFICATION:

PART NUMBER:

EXAMPLE:

HOT ROLLED STEEL PLATE

ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

MT-HRS-P-[T.TTT]

WHERE T.TTT IS PLATE THICKNESS IN INCHES

MT-HRS-P-0.750

TOLERANCES PER MANUFACTURER SPECIFICATIONS

DART AEROSPACE		New Industry, Canada, Canada	
TITLE HOT ROLLED STEEL PLATE			
DWG NO.		REV.	
DESIGN BY: SAC 09/27/2017		MT-HRS-P	
CHECKED BY: VAL 09/27/2017		XXX 3.000 FRACTIONS 1/16	
MFG. APPR: DE 09/27/2017		XX 3.91 ANGLES 3/16	
APPROVED BY: VAL 10/05/2017		1. DIMENSIONS AND SURFACES - 1/4"	
DATE: 09/27/2017		2. DIMENSIONS AND TOL PER ASME Y14.5M-2009	
SCALE: NTS		3. DIMENSIONAL LIMITS APPLY	
WEIGHT: N/A		SHEET 1 OF 1	
COPYRIGHT © 2017 BY DART AEROSPACE LTD.			
THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION FROM DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-HRS-R-6.000
DATE: 19/01/08

PO / BATCH NO.: P00041482/5123414

MATERIAL CERT REC'D: Yes
QUANTITY RECEIVED: 2ft
QUANTITY INSPECTED: 2ft
QUANTITY REJECTED: 0

THICKNESS ORDERED: 6.000"
THICKNESS RECEIVED: 6.000"
SHEET SIZE ORDERED: —
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM A1018
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	HT: 1702492
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>61</u>	SIGNED OFF BY: _____		
DATE: <u>19/01/08</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in